

SIX NEOPHYTES IN ANDAMAN & NICOBAR ISLANDS

M. K. VASUDEVA RAO

Botanical Survey of India, Port Blair

ABSTRACT

The Andaman & Nicobar Islands are still to a large extent support a native flora, not much mixed up with adventives. However, in certain localities where man has begun his 'developing' activities, he has created habitats congenial to newcomers or Neophytes. Six species of these Neophytes is reported, with notes.

Thellung classifies Neophytes as plants "which newly enter an area through the often unintentional activities of man. They appear to be components of the native vegetation, reproducing and spreading much as do the indigenous members. Their future existence is independent of man" (King, 1966).

The Andaman and Nicobar Islands situated much isolated from the major land masses had very low scale of inhabitants till the middle of the eighteenth century. Earlier to the establishment of a convict settlement in Port Blair, there had been practically little chance for foreign introductions. Since 1858, the human activities increased in these islands and many exotics have been introduced unintentionally or intentionally. Kurz (1870) in his Report on the Vegetation of Andaman Island recognized 76 alien species as early as 1866. Prain (1890) reviewed the situation and while adding more to the list discussed the problem in detail. Parkinson (1923) lists 112 species as non-indigenous and Thothathri (1962) recognized 64 species in this category. While such information is available for Andaman islands, no such report on non-indigenous plants is available for Nicobar islands.

A study of the presence, frequency and ability to survive, of introduced plants in a particular region, is a rewarding approach, more so if done periodically. It is towards this aspect that the six species which were hitherto unknown in these islands and are known as adventives or ruderals elsewhere are recorded.

ASTERACEAE

Blumea eriantha DC. in Wight, Contrib. Bot. Ind., 15. 1834; Hk. f. Fl. Brit. Ind. 3: 266. 1881; Randeria in Blumea 10(1): 279, pl. 20-c, 21-c, 1960.

This can be easily distinguished from other species of *Blumea* of this region by the multicellular hairs on corolla in addition to collaters.

This species so far known to be endemic to mainland is presently seen around Port Blair forming seasonal bushes.

Specimens examined: S. ANDAMANS: Port Blair, Vasudeva Rao 7949 (PBL).

Eleutheranthera ruderalis (Sw.) Schulz.-Bip. in Bot. Zeitung (Berlin) 24: 165. 1866; Back. & Bakh. f. Fl. Java 2: 407. 1965; Bennet in Curr. Sci. 34: 411, ff. 1-7. 1965 et Fl. Howrah 372. 1979. *Melampodium? ruderales* Sw. Fl. Ind. Occ. 3: 1372. 1806. Common in cleared, shady, moist locations.

A pantropical weed, native of tropical America. It is first reported for India from W. Bengal (Bennet, *l.c.*). It is now a well established weed in many areas of Andaman and Nicobar islands.

This species is often mistaken for *Eclipta alba* Hassk. and *Synedrella nodiflora* Gaertn., but can be easily distinguished by the achenes and glandular pubescent leaves.

Specimens examined: M. ANDAMANS: Mayabunder, N. Bhargava 1933 (PBL). S. ANDAMANS: Rangachang, Balakrishnan 282 (PBL); Collinpur, Balakrishnan 225 (PBL); Havelock Is., R. K. Premanath 6107 (PBL). N. NICOBARS: Car Nicobar, N. G. Nair 3738 (PBL); Kamorta, N. Bhargava 4697 (PBL).

Strachium sparganophorum (L.) O. Ktze. Rev. Gen. Pl. 366. 1891; Back. & Bakh. f. Fl. Java 2: 370. 1965; Vasudevan in Bull. bot. Surv. India 8(2): 202, ff. 1-18. 1966. *Ethulia sparganophora* L. Sp. Pl. ed. 2, 1171. 1763. *Sparganophorus vaillantii* Crantz, Inst. Rei Herb. 1: 261. 1766; Ridley, Fl. Mal. Pen. 2: 179. 1923.

Fairly common on roadsides, fresh water pond-sides, waste places near coastal areas.

This species is native of tropical America and known to be adventive since long in Africa, Malaysia and Java. It has been first reported for India from Trivandrum in Kerala State (Vasudevan, *l.c.*). It is recently seen establishing itself in Nicobar Islands, but so far not found in Andaman Islands.

Specimens examined: N. NICOBARS: Katchal, Chakraborty 5603 (PBL); Car Nicobar, N. G. Nair 1531 (PBL). S. NICOBARS: Gt. Nicobar, Pygmalion point, Balakrishnan 3849 (PBL).

CLEOMACEAE

Cleome rutidosperma DC. Prodr. 1: 241. 1824; Jacobs in Fl. Males. ser. I, 6: 104. ff. 30, 33 b. 1960; Back. & Bakh. f. Fl. Java 1: 183. 1963.

Annual, erect or ascending herbs up to 1 m high. *Stems* flaccid, angular, much branched; thickly to sparsely bristly on stems, petioles and nerves underneath. *Leaves* trifoliate; petioles 1-5 cm long; leaflets subsessile, ovate, oblong-lanceolate or rhomboid, 2-5 cm long, 0.5-2.5 cm broad, acute at apex, ciliate. *Flowers* in terminal leafy racemes; pedicels ± 2 cm, elongating to ± 3 cm in fruit, densely glandular hairy. *Sepals* 4, linear to linear-lanceolate, ± 4 mm long with short bristles on outside. *Petals* 4, ± 1 cm long, bluish-purple. *Stamens* 6. *Gynophore* ± 1.5 mm long, elongating to ± 1 cm in fruit. *Ovary* linear, minutely glandular. *Capsule* on gynophore, cylindrical, striate, 3-7 cm long, tapering at both ends, pubescent. *Seeds* horse-shoe shaped, cleft open, ± 2 mm diam.; black with faint concentric ribs and stronger cross-ribs: base of the seed with a prominent white elaiosome.

Rare in disturbed or cultivation areas.

A species native to tropical West Africa, known to be adventive in Malaysia and New World. Reported here for the first time for Andaman and Nicobar Islands.

This species can easily be distinguished by the white elaiosome at the funicular end of the seed.

Specimens examined: S. ANDAMANS: Port Blair, M. K. Vasudeva Rao 6693 (PBL). N. NICOBARS: Kamorta, N. Bhargava 4683 (PBL).

LAMIACEAE

Hyptis brevipes Poit. in Ann. Mus. Hist. Nat., Paris 7: 465. 1806; Hk. f. Fl. Brit. Ind. 4: 630. 1885; Ridley, Fl. Mal. Pen. 645. 1923; Mukerjee in Rec. Bot. Surv. India 14: 62. 1940; Back. & Bakh. f. Fl. Java 2: 634. 1965; Keng in Fl. Males. ser. I, 8: 369, ff. 27 a-c. 1978.

Erect, annual herbs, common in waste places and paddy fields.

This is native of Mexico, naturalised in

many tropical regions including Malesia. Reported from Andamans for the first time.

Specimens examined: N. ANDAMANS: Diglipur, *Balakrishnan & Nair* 4973 (PBL). S. ANDAMANS: Chouldhari, *Balakrishnan* 488 (PBL); Myomyo, *Balakrishnan* 527 (PBL); *Ibid.*, *Balakrishnan* 1379 (PBL); Humfreygunj, *Ellis & Ramamurthy* 18831 (PBL).

Leucas biflora R. Br., Prodr. 504. 1810; Wight, Icones, 3: t. 866. 1844-45; Hk. f. Fl. Brit. Ind. 4: 683. 1885.

A fairly common ruderal herbaceous species.

This species is known from Peninsular India and Sri Lanka. Recently collected from Car Nicobar Island and is recorded for the first time for Andaman & Nicobar Islands.

Specimens examined: N. NICOBARS: Car

Nicobar, Lapathy, *N. G. Nair* 1528 (PBL); *Ibid.*, *N. G. Nair* 4450 (PBL); Auckchung, *N. G. Nair* 2693 (PBL).

ACKNOWLEDGEMENT

The author is thankful to Dr. N. P. Balakrishnan, Regional Botanist, Botanical Survey of India, Port Blair, for the encouragement.

REFERENCES

- KING, L. J. Weeds of the World Rep. New Delhi. 1974.
 KURZ, S. Report on the Vegetation of the Andaman Islands. Calcutta. 1870.
 PARKINSON, C. E. A Forest Flora of the Andaman Islands Simla. 1923.
 PRAIN, D. The Non-indigenous species of the Andaman Flora. *Journ. As. Soc. Bengal Old, Ser.* 59 : 235-261. 1891.
 THOTHATHRI, K. Contributions to the Flora of the Andaman and Nicobar Islands. *Bull. bot. Surv. India* 4 : 281-296. 1962.